5

10

15

ABSTRACT OF THE DISCLOSURE

Modulation section 201 performs modulation processing on transmission data. Mapping control section 202 controls mapping of the baseband signal onto the subcarriers so that the important information conventionally transmitted by one subcarrier is transmitted by two subcarriers and one of the two subcarriers should be the subcarrier with a carrier frequency signal of frequency 0 which was conventionally not used. IFFT section 203 performs IFFT processing on the modulated transmission data. Transmission section 204 performs transmission processing on the IFFT-processed transmission data and transmits the processed transmission data from antenna 205.